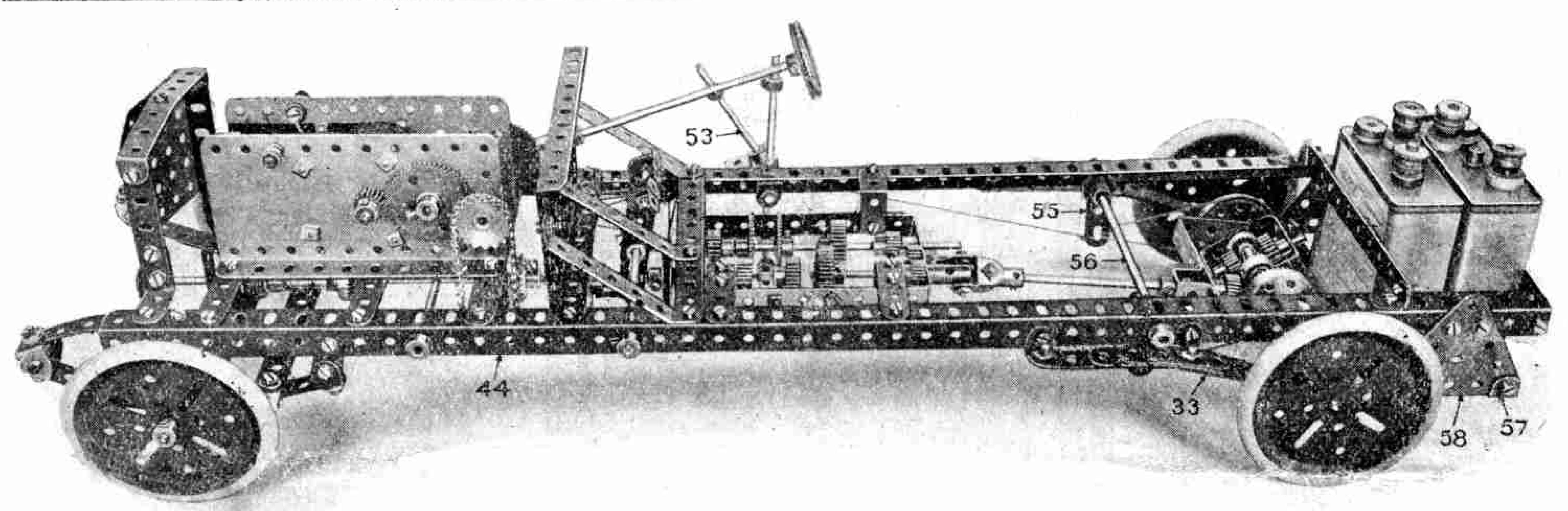


ECCAN MAGAZINE

TO HELP MECCANO BOYS TO HAVE MORE FUN THAN OTHER BOYS





A New Meccano Motor Chassis.

We have pleasure in illustrating what we consider to be a veritable triumph in Meccano model-making. The new Meccano chassis was first shown at the British Industries Fair this year where it attracted marked attention, and since then it has been adopted by various schools of motoring for teaching purposes. It forms a perfect demonstration of the main mechanism of a modern motor car with a perfect gear box, differential and steering gears, and an underslung system of springing. This model should be closely studied by every Meccano boy.

The chassis frame is made of 24" angle girders connected by 5½" strips, the overall length being 26" and breadth 7¾". The chassis is under-slung, the elliptical leaf springs being built up from strips of various sizes. Worm and wheel Ackermann steering chassis is under-slung, the elliptical leaf springs being built up from strips of various sizes. Worm and wheel Ackermann steering chassis is under-slung, the elliptical leaf springs being built up from strips of various sizes. Worm and wheel Ackermann steering is included. The Meccano Electric Motor, mounted in the position occupied by the engine in real automobile practice, provides the motive power, the current being obtained from a four volt accumulator mounted at the rear of the chassis. The drive is the motive power, the current being obtained from a four volt accumulator mounted at the rear of the chassis. The drive is the motive power, the current being obtained from a four volt accumulator mounted at the rear of the chassis. The drive is the motive power, the current being obtained from a four volt accumulator mounted at the rear of the chassis. The drive is the motive power, the gear-driven back axle, on which is situated through a two-speed sliding-pinion gear box and universal-jointed propeller shaft to a gear-driven back axle, on which is situated through a two-speed sliding-pinion gear box and universal-jointed propeller shaft to a gear-driven back axle, on which is situated through a two-speed sliding-pinion gear box and universal-jointed propeller shaft to a gear-driven back axle, on which is situated through a two-speed sliding-pinion gear box and universal-jointed propeller shaft to a gear-driven back axle, on which is situated through a two-speed sliding-pinion gear box and universal-jointed propeller shaft to a gear-driven back axle, on which is situated through a two-speed sliding-pinion gear box and universal-jointed propeller shaft to a gear-driven back axle, on which is situated through a two-speed sliding-pinion gear box and universal-joi

The universal joint to the propeller shaft—a combination of the cross-pin and sliding types—operates in exactly the same manner as on a real chassis. The steering also follows actual car practice, a worm and pinion being used, the shaft being connected by rods and strips to the steering swivels.

We have prepared full instructions for building the Motor Chassis and these are contained in a beautifully illustrated sheet on art paper, which shows not only the complete model but also sectional drawings of all the details. The price of this instruction sheet is 3d., or 4d. post free.

Editorial.

Springtime in Meccanoland.

This is the time of year when life in that wonderful country Meccanoland enters upon its happiest and busiest phase. All its inhabitants put their Outfits in first-class order and build and build, and never cease to build. They invent, they compete for prizes, they attend Club meetings, they correspond with kindred spirits, and they write stern notes to the Editor of the M.M. calling upon him to mend his ways. We are in for a gloriously busy time, boys!

Dick's Visit to Meccanoland.

I am asked so many times each week for copies of this fascinating little yarn that I have decided to reprint it in a new and compact form. This story of Dick's famous interview with Mr. Hornby has attained extraordinary popularity amongst Meccano boys, and I am glad to once more be able to fill demands for it. The new edition will be ready by the time this issue of the M.M. is in the hands of our readers.

Hornby Clockwork Trains.

The making of first-class Clockwork Trains marks an epoch in the history of Meccano Limited. In designing and manufacturing these goods, neither thought, care nor expense

have been spared, and they strike a note in quality and efficiency never before reached in this type of toy. In appearance they are superb, and in action they are a delight to watch.

A New £250 Competition.

There is no weakening of interest in our big annual Model-building Competition, and I have pleasure in announcing that another one will be run during the coming winter. Every Meccano boy has ideas for new models and new movements. We want all these ideas to be sent in to us so that we can make them known to hundreds of thousands of other Meccano boys, and hundreds of prizes will be awarded to those who submit the best efforts.

New Parts for Old.

At the beginning of a new Meccano building season I want to make it as widely known as possible that any boy who has old or damaged parts can have these replaced by bright new parts on payment of half list prices. The old parts should be returned either through a dealer or direct, accompanied by a list, and a remittance covering the cost of the new parts, plus postage.

Meccano Manual No. 3.

For some time past we have been hard at work on a new Manual, which will include a number of entirely new Meccano models. This is now in the hands of the printers, and I hope will be ready by the end of September. The price will be 1/3, or 1/51d., post free.



The New Meccano Book.



Inia beautiful book should be in the hands of every Meccano boy. Besides illustrating and describing each Outfit and explaining the simplicity and beauty of the Meccano system, it gives full particulars of the new Electrical Accessory Outfits, the Meccano Clockwork and Electric Motors, the wonderful new Hornby Clockwork Train System; the Tin Printed Clockwork Trains and Vertical Steam Engines. It also contains illustrations of Prize-winning Models in the Big Meccano Competitions, and a fully illustrated list of the entire range of Meccano parts, including the new and valuable parts which have been added recently.

We wish every reader of the Meccano Majazine to possess one of these beautiful booklets. A copy will be sent FREE on receipt of your postcard. Write to-day.

The demand for "A Message from Meccano Town" will be very great, and we advise you to take advantage of this splendid offer, and write to us at once for your copy.

How to get the Meccano Magazine regularly.

The Meccano Magazine is now sold by most of the regular Meccanodealers but in order to prevent disappointment you should place an order with your dealer for a copy of each issue to be reserved for you. The price of each issue is 1d. If you experience difficulty we will mail you a copy regularly on receipt of 6d. for the next six issues, or 1/- for the next twelve.

The Life Story of Meccano.

BY FRANK HORNBY. (Continued.)

At our Head Office in Binns Road we have a room which we call our Museum, and it is in this room that we keep samples of all constructional outfits which have been brought out in various countries throughout the world in imitation of Meccano. Probably no article or commodity of outstanding merit was ever manufactured which was not imitated at some time or other by envious competitors, and Meccano is certainly no exception to this. In fact, I do not know of any article ever made which has had to submit to so much imitation, most of it unfair, and much of it unscrupulous.

It is very rarely indeed, however, that an imitator meets with real success. He is always following in the rear of the article which he is imitating, and is always handicapped by his own lack of initiative. There is neither room nor justification for an imitator, unless he produces a superior article, and this, so far as Meccano is concerned, is quite out of the question. As I have so frequently explained to you, Meccano is what you might call a basic system, rigidly following the lines of real engineering. Unless, therefore, one of our competitors were to introduce something which is an improvement upon engineering itself he could offer nothing superior to Meccano. So far as quality, accuracy, and finish are concerned, I know of no factory in the world capable of producing better work than our own, and I am not afraid of any competition on this score.

I think amongst the first of the imitators of our system was a man called Walther of Germany, who brought out a metal constructional toy containing strips with equidistant holes, etc., ander the name of "Stabil." He also imported his goods into France under the name of "Arts et Metier." It was a flimsy kind of toy, however, and not well manufactured, and although it had a small sale, I think the principal effect of its introduction was to emphasise the value and

quality of Meccano. In the course of the next few years the German manufacturers, who at that time largely dominated the toy business in this country, became alarmed at the success of Meccano, and an avalanche of imitations followed. They all went badly astray, however, leaving the path of engineering, and introducing little make-shift fastenings, couplings, and odd contrivances, which they evidently. thought were ingenious, showy, and quite good enough for a toy which was to be played with by boys. Some of you may remember one of them called "Structator," manufactured by the largest makers of metal toys in Germany, and introduced into this country before the war with a great flourish of trumpets. It was a showy toy, but it was just about as bad in principle as it could well be. Its method of fastening was defective, and the models would neither hold together nor work. It died a natural death, as all the other imitations of Meccano have done. There are no exceptions and, as I have already stated, no imitator will meet with success until he introduces something which is an improvement upon real engineering.

Not much was seen in this country of the many other German imitations, but they had some little vogue on the Continent before Meccano became thoroughly well known there. The best that can be said of them is that some were bright and showy, and had attractive labels on the box lids. One or two of them tried to get a footing in this country, but neither the public nor the dealer would pay any attention to them, so that little was heard of them. (To be continued)

Suggestions by Meccano Boys.

These columns are reserved for dealing with suggestions sent in by Meccano users for new parts, new models, and new ways of making Meccano model-building attractive. We are always glad to hear from any Meccano boy who has an idea which he considers will be useful to the Meccano system.

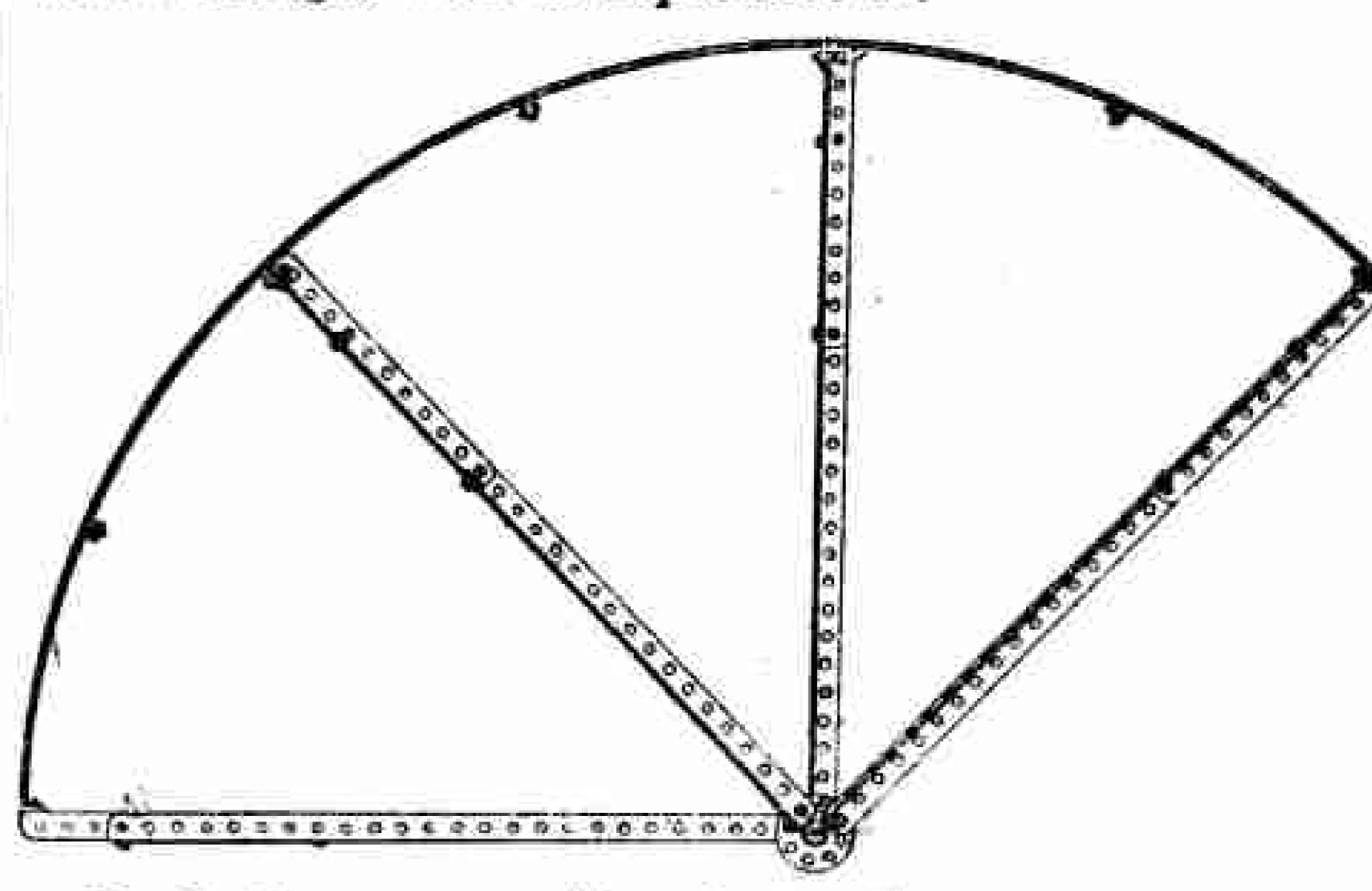
P. C. CUMMINS.—Your criticisms of the Hornby Train system are sound in the main, but there are manufacturing difficulties which it would be a little difficult to explain here and which prevent their immediate adoption. We are improving the system all the time, and you will see from the latest patterns that very great progress has been made. We are glad to know that you hold such a high opinion of the Hornby Train.

REGINALD W. LUDMAN .- With regard to your suggestion for a spring buffer, please see our answer to

Alfred Beadles.

WILFRED GORTON (Stalybridge) .- Our 3" pulley wheel with a rubber ring in the groove makes an excellent wheel for a motor chassis. We already list a cone pulley and if pulleys larger than these are required they may be secured on the same shaft hutted against the cone. We shall consider your suggestion for a radiator and motor bonnet.

H. E. COULSTING (Macclesfield).—We thank you for your illustration how to make a large wheel 28½" diameter with a flat rim and without the bolt heads protruding. No doubt Jack Shaw, Manchester, will appreciate this as well as our other readers and we have thought well to reproduce it.



D. S. PARNACOTT (Anerley).—Your description of an automatically reversed fan is interesting, and we hope to illustrate one in our next issue of the Electrical Manual.

ALEC SMYRNA.—We sold a Water Motor some time ago but there was little demand for it. We are afraid it was considered too inconvenient and messy for driving Meccano models.

F. J. ADAMS (Edmonton).—We have in mind the introduction of a part such as you suggest with two discs running on ball bearings or on the flat. When this is ready it will be announced in the Meccano Magazine.

C. CHILTON (Woburn Sands).—We would like to have further particulars of the purpose of your

suggested road spring.

K. DUTFIELD (S. Hackney).-We doubt whether the 21"X21" flanged plate would have many uses. SAMUEL H. PEARCE (Birmingham).—We are illustrating a signal gantry in our No. 3 Manual which will be ready shortly, and which we think will help you. We shall consider the introduction of a 3-bladed propeller.

K. W. MILLER (Ventnor).—The curved double angle strip will receive consideration. The introduction of an armature and commutator would require the corresponding parts to complete a motor. We think it a little premature to deal with this.

D. GAMBLE-JONES (Haverstock Hill).-It would not be a practical proposition to flatten rods as you suggest. If you will let us know the purpose for which you require them we might possibly help you.

ERIC BERNARD (London).-We shall consider the opening of a school of Engineering for Meccano boys later. We illustrate in our Flectrical Manual a signal which can be worked automatically by the train running over an insulated section of the line.

JACK DERRY (Worcester).—We presume you mean foot bridges under which the Hornby train may run, and we shall consider them later. We illustrate some very excellent bridges in our Meccano Manual over which the trains may be run.

F. C. BURLAND (Putney).—We doubt whether wire would be as convenient as fancy string to decorate

Meccano models. T. K. GLENDINNING (Thirsk).-We doubt whether it would be advisable to introduce a petrol engine to

drive Meccano models on account of the danger of fire. G. I. Morgan (Portheawl).—We do not think that a flat headed bolt would overcome the difficulty of a projecting head, but we shall consider the matter. DAVID OGILVY BOND (Scorrier).—We now include

in our list of parts a 21" fly wheel which we think will serve your purpose.

J. A. HARRIS (Birmingham).—A long thin screwdriver capable of being passed through the holes in the strips, etc., such as you suggest, is included in our list of parts.

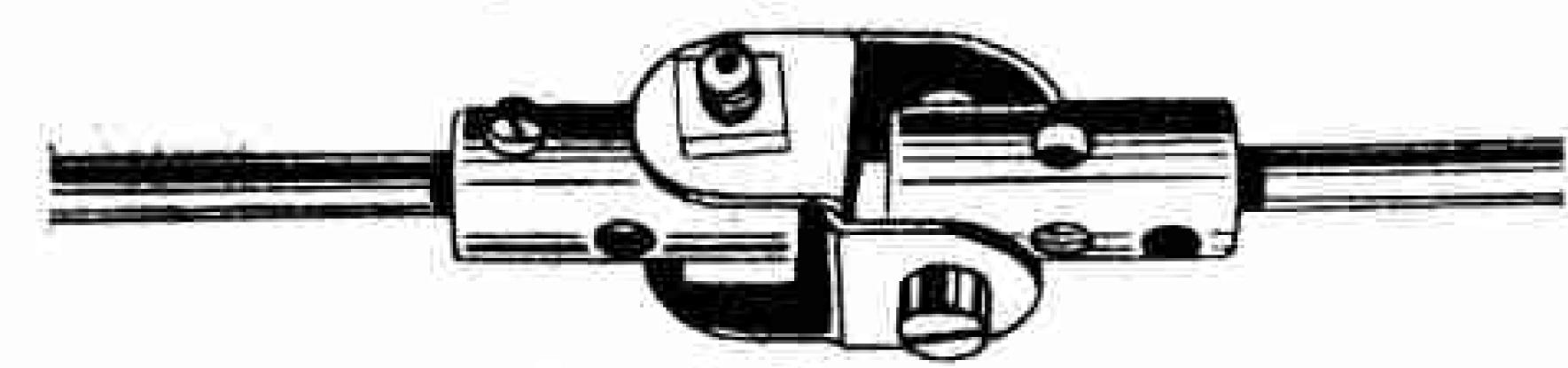
R. R. Comber (East Grinstead).—We shall consider the introduction of a circular saw which, with the aid of a Meccano motor, would be capable of cutting thin material.

D. EDWARDS (Redhill).—We have a few 220 volt motors but these run at such a high speed that it would be necessary to gear them down to work Meccano models.

S. Wilson (Sudbury).—We are now engaged on an escapement which will be announced when ready.

M. HERWALD (Manchester).—We are afraid it would require a very strong spring to work a clock made with Meccano parts. We are experimenting with a clock made with Meccano parts, but operated by weights.

S. W. Gough.—A Hooke's coupling may be made from the existing Meccano parts as illustrated below:—



HOOKE'S COUPLING.

W. I. Rogers (Plymouth).—We are introducing several small-sized angle girder lengths amongst which is a 2½". We shall consider your suggestion for pivot bolts, and also a larger diameter spring.

E. PAGE (London, N.).—We would suggest that you obtain a copy of instructions for making the Meccano Chassis—price 4d. post free. We think this might help you. We shall consider the part you suggest.

CECIL FARMER (Stratford-on-Avon).—We think your swivel coupling possesses advantages and we shall give it consideration.

MAX HAMILTON (Warkworth, New Zealand).—We shall give the gear wheel you suggest consideration. Would not our worm and pinion serve your purpose for a slow drive?

W. Godfrey (Camberley).—We list fibre washers for the purpose you suggest.

H. R. PATTEN (West Drayton).—We already include a \{\frac{1}{2}\) reversed angle bracket in our list.

ROBERT N. HOUSTON.—We shall consider your suggestion for flat pulleys.

W. Poole (Sheffield).—We are including in our list of parts a threaded rod 11½" long. We doubt whether it would be advisable at present to introduce a spiral gear.

A. E. F. Spence (Manchester).—2½" and 3½" angle girders are being included in our list of parts. We shall consider your suggestion of the introduction of gear wheels giving a ratio of 1-4 or 1-6 in engagement with a ½" or ¾" pinion. We are now making our pinions with 19 teeth and 25 teeth to engage with gears having 57 and 50 respectively. These will give you the ratio you require. Our Sprocket chain is made to pitch with our gear wheels or rack segments in alternate teeth. We may introduce bolts with hexagonal heads later.

E. G. BRYANT (Aberdeen).—We are now making rails for our No. 2 Hornby trains with a diameter of 4'. The new connections on our trains enable them to travel backwards or forwards without fouling. We shall consider your suggestion for a brake. We appreciate your kind expressions and would say that it also gives us great pleasure to know that our efforts are being appreciated.

ALEC (The Point, Smyrna).—We hope later to alter the type of our vertical steam engine so that it may be attached to our models and sufficiently powerful to work them. Our present type is simply a working model.

E. R. CLARKE (Dartford).—We consider your idea of publishing a small booklet on the different uses of Meccano parts a good one and we shall keep this in mind.

CYRIL STOCKLEY (Stafford).—Suggests that by bolting two curved rack segments opposite each other on a face plate they may be used in conjunction with a 1" pinion to operate a mechanical hammer or embossing machine. This will no doubt be useful to many Meccano boys.

Walter W. Frieby (Market Harborough).—We should be glad if you would send us a small sketch for the use of eye bolts, when we could better consider the matter.

W. Combs (Bradford).—We cannot see any purpose in introducing a dynamo, as the current necessary to run this could be utilised to do the work of the dynamo unless other power were intended to be used.

A. L. CHATTELL (Huesca, Spain).—We think your suggestion of a round rubber band placed in the groove of a pulley wheel to prevent the cord slipping a good one, and might be of advantage to other Meccano boys.

R. LEAVER (Dumfries).—We use 3" pulley wheels with a round rubber ring in the groove for the Meccano chassis. The printed instructions for making this chassis costs 2d. At present we only have gauge 0 lines but you could make lines for your other models with Meccano strips. The boiler of a Hornby train may be bolted to a Meccano plate, and this can be bought separately.

G. S. Reid (Edinburgh).—The idea of connecting a pinion or bush wheel to a threaded boss is ingenious, but we should be glad to know to what purpose this arrangement could be applied.

A. CLATWORTHY (Camberwell).—See our reply to K. W. Miller.

Victor Linrott (Beccles).—We have included a fly-wheel and crank in our list of parts which may possibly serve your purpose. The boiler of our Hornby loco, may be connected with a Meccano plate. This and a funnel may be purchased separately.

I. K: HARE (Biggleswade).—We hope before long to introduce a much better type of funnel into the Meccano system which will serve a variety of purposes. We shall consider your suggestion regarding the bell crank. A fly-wheel has already been added to our list.

W. G. SMITH (Wigton).—Our present lines for the Hornby trains are now being made so that a third rail may be attached to them.

AIBERT TYRER (Churchfields).—We supply buffers and you will see them illustrated in our list of parts.

F. Hooper (Brockenhurst).—We are at a loss to understand the purpose of a drum or roller with knives all round it.

ERNEST W. DAY (Bootle).—We shall consider your suggestion for an improved eccentric. For many purposes our strip coupling may be used to connect a rod to our new eccentric. We are introducing a number of smaller sized angle girders to those already in our list, and they are announced below. Your suggestion for smaller plates will be considered, also larger flanged wheels. We have introduced a new type of coupling to our Hornby train which prevents fouling when reversed.

R. Maner (Exeter).—We have already introduced two curved strips of different radii and propose adding others as occasion requires.

S. H. Frank (Petersfield).—Your suggestion to introduce a rim which could be attached to a 3" wheel to form a flange with the object of making a driving wheel for a locomotive will have our consideration.

HAROLD JONES (Sevenoaks).—We have not forgotten your suggestion for a slotted rod, but our difficulty is how to devise a suitable sleeve to be used in connection with it, to operate models. We have this under consideration. We shall be glad to exchange any defective parts you may have. Each part is inspected in our factory before it is sent out, to avoid defects.

J. W. HARRIS (Jersey).—It would not be advisable to introduce a circular rail of a definite diameter as this might not be suitable for other models of a similar kind.

ERIC CHEADLE (Dumfries).—You might let us know how you would propose to use a ½" pinion 2" long when we should be better able to consider the matter. We shall consider the introduction of 1" girder brackets. See our replies to W. L. Rogers and Harold Jones.

G. ALLEN (Wisbech).—We were very interested in reading an account of year work, which must be very trying. We do not quite understand the type of wheel you suggest to run freely on the centre boss. Perhaps you will give us further particulars and also of the other matters you refer to.

A. LESTER (Dawley).—The wheel you suggest would be a very expensive one to make, and we doubt whether the purposes for which it could be used would justify its introduction.

F. Williams (Warrington).—We shall consider the introduction of a single bent angle strip as no doubt it would have many uses.

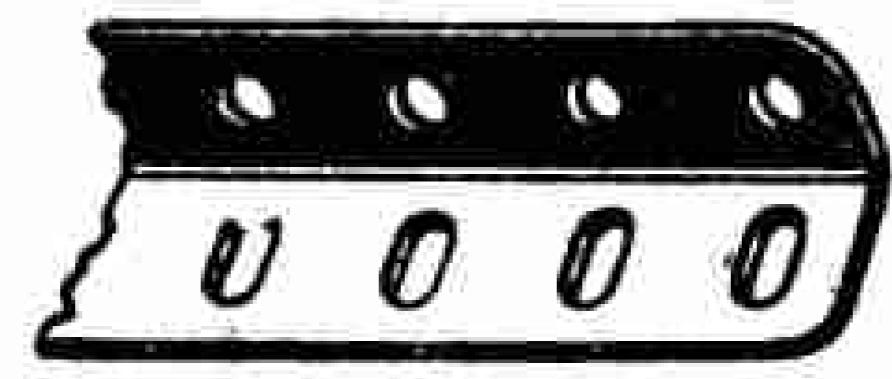
GIUSEPPE VALERIANI (Barciano, Italy).—We shall go carefully into the merits of the hook you suggest and may possibly adopt it after experimenting.

HOODY SMITH (Waltham).—See our reply to T. K. Glendinning.

Drog Creek van (Wildroggen) — We hope to introduce

DICK CLELAND (Kilcreggan).—We hope to introduce a 3" sprocket wheel later. This will be announced when ready.

New Meccano Parts.

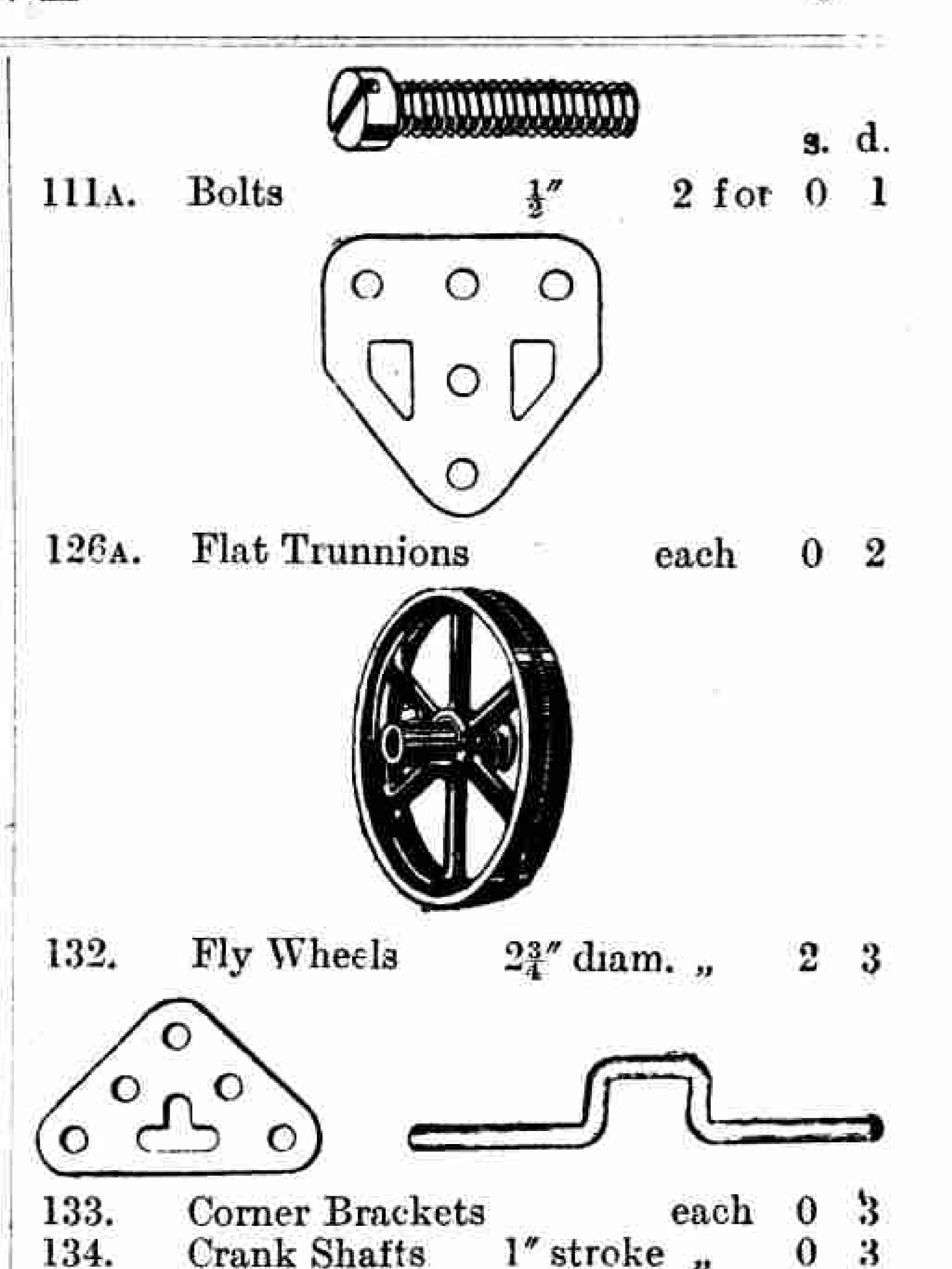


| | | | | | 8. | d. |
|-------|-------|---------|-----|-------|----|----|
| 9A. | Angle | Girders | 43" | doz. | 1 | 0 |
| 9в. | ,, | 39 | 31" | 99 | 0 | 10 |
| 9c. | 3.9 | 23 | 3" | ,, | 0 | 9 |
| 9D. | 33 | 372 | 21" | 231 | 0 | 8 |
| 9E. | 23 | 12.75 | 2" | 2.202 | 0 | 7 |
| 9F. | 53 | 3.5 | 11" | 25 | 0 | 6 |
| 0.000 | 557 | | | 20 | 90 | |

Perf. Strips, Slotted

60p. Dble. Angle Strips $4\frac{1}{3}'' \times \frac{1}{2}''$,, 0

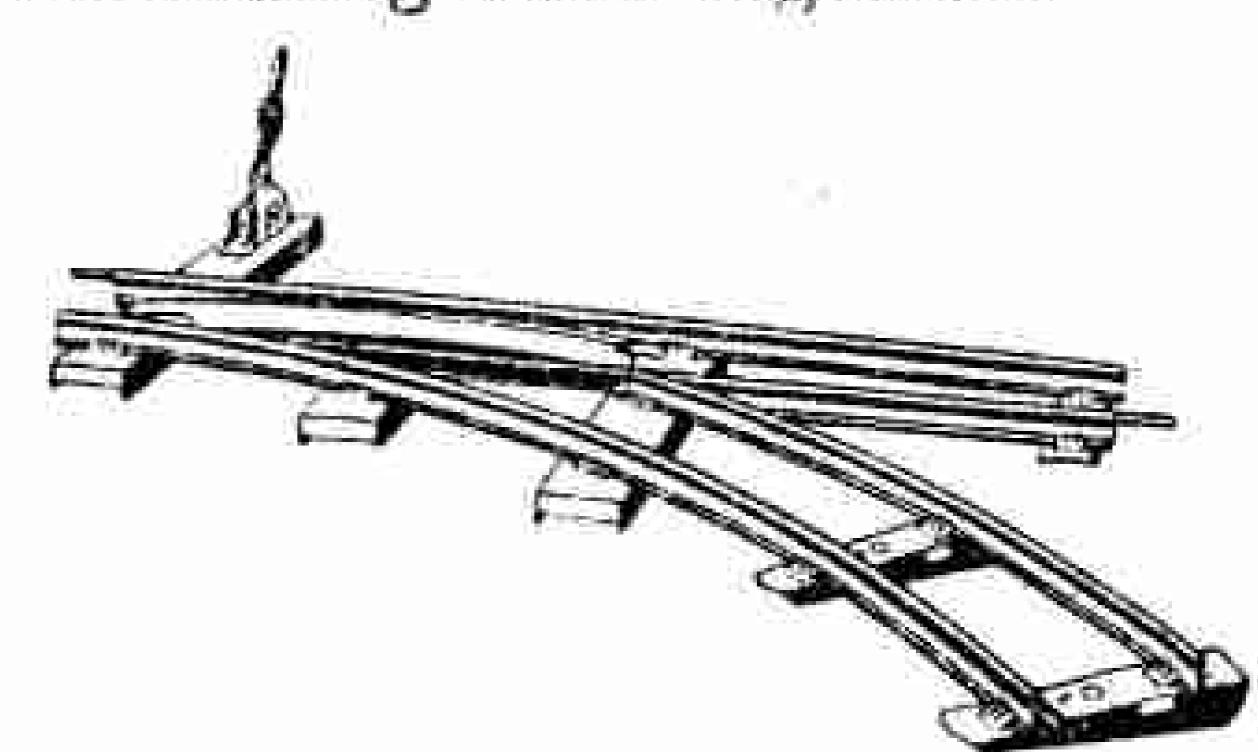
| 78. | Screwed | \mathbf{Rods} | 111" | each | 1 | 0 |
|------|---------|-----------------|------|------------|---|---|
| 79. | ,,, | ** | 8" | 9.5 | 0 | 9 |
| 79A. | 3.0 | 39 | 6" | 99 | 0 | 7 |
| 80B. | 33 | 22 | 43" | :35 :35 | 0 | 6 |
| 82. | | | 1" | - ,, | 0 | 2 |



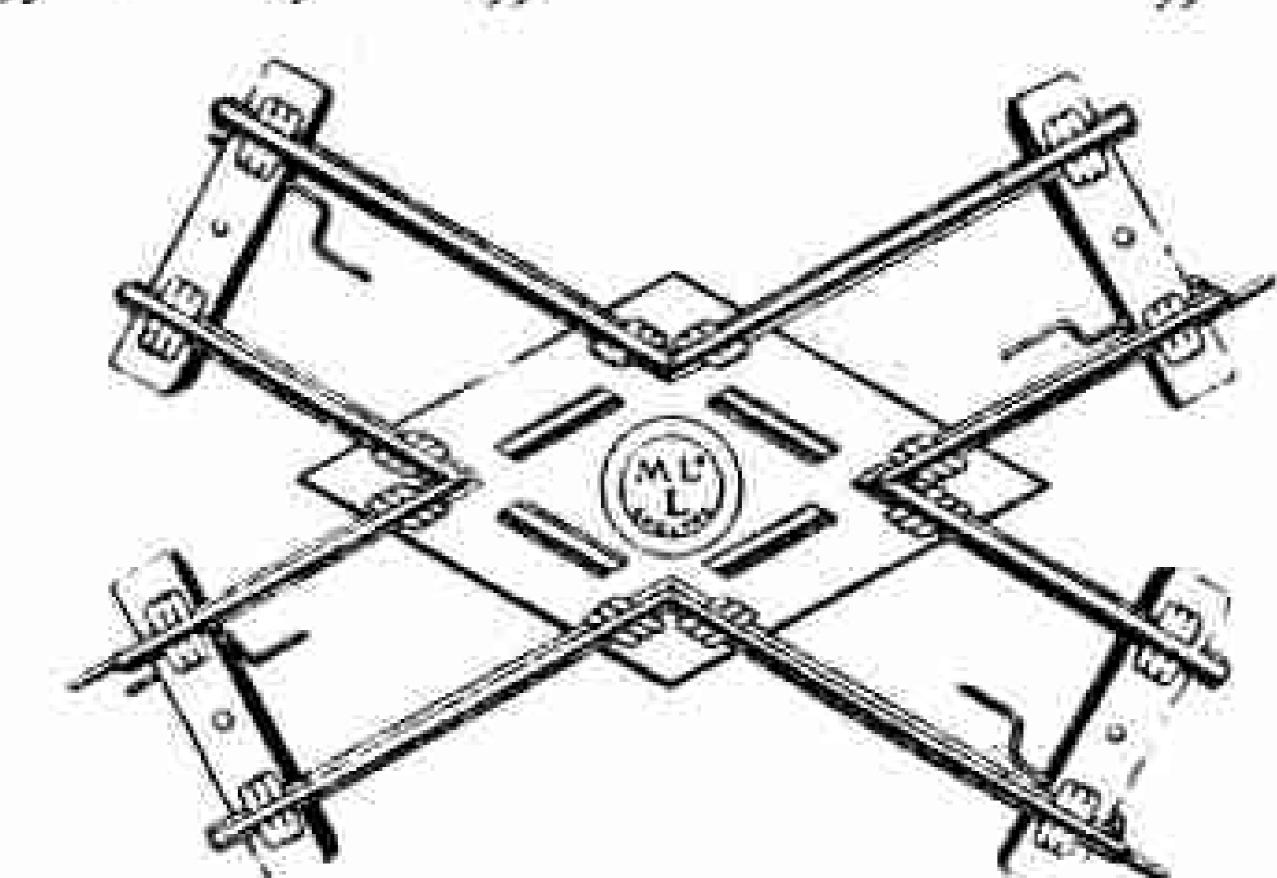
Points and Crossings for Hornby Trains.

We have now ready for delivery right and acute Angle Crossings for Hornby Trains, and by the end of September we shall be able to deliver right and left-hand Points for both 2-ft. and 4-ft. diameter circles.

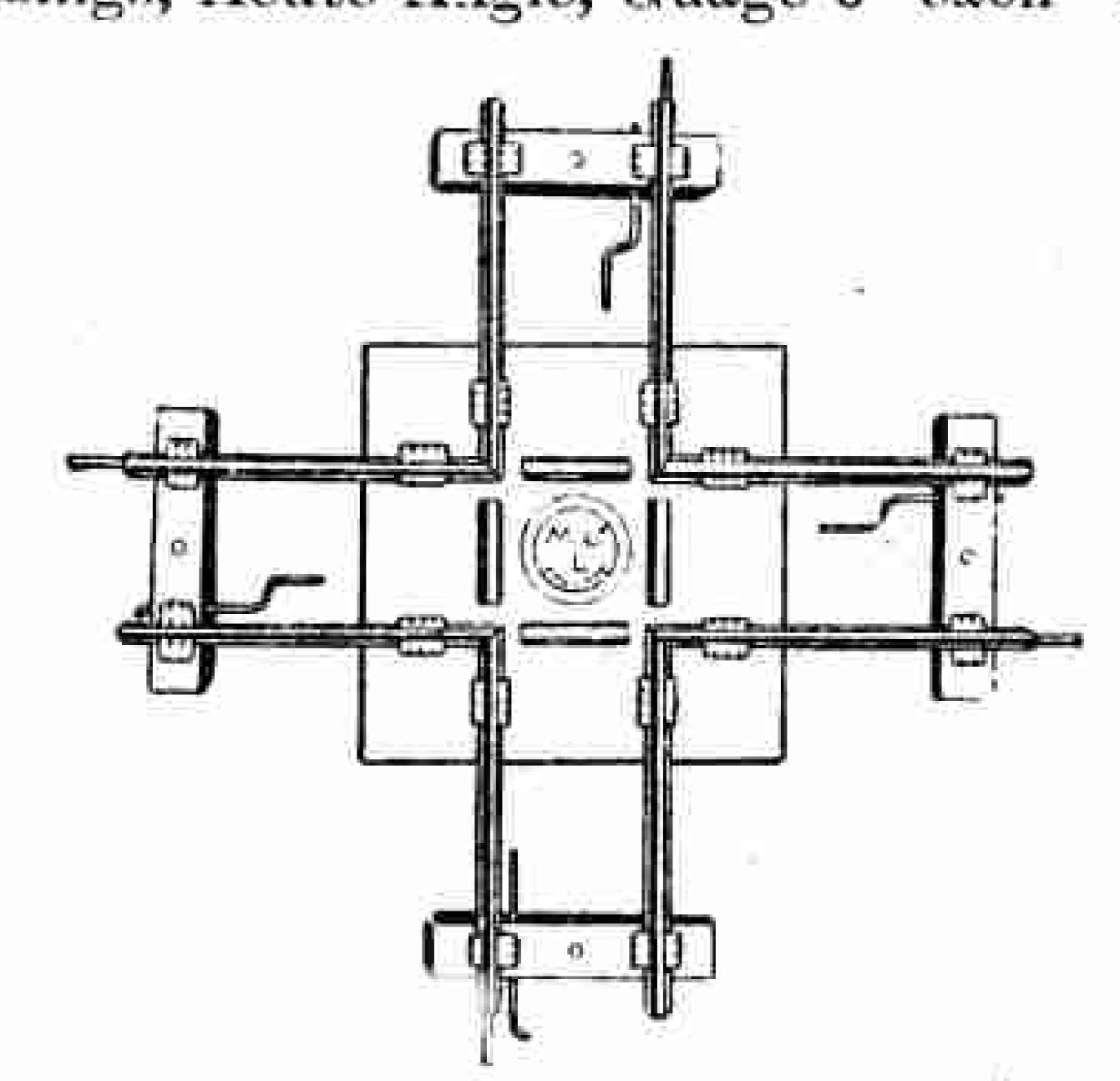
It should be carefully noted that both crossings and points are for use only with the rails supplied with 1921-2 model Hornby Trains, and that they are not adaptable to last year's rails. The improved rails are slightly higher and a larger diameter oin is used for holding them together.



Points, Right or Left-Hand, Gauge 0, s. d. for 2 feet, diam. circle each 5 0, 4 ,, 5 0



Crossings, Acute Angle, Guage 0 each 2 6



Crossings, Right Angle, Gauge 0 each 2 6

The Meccano Guild



A Fellowship of Meccano Boys



Member's Badge

The objects of the Meccano Guild are:

Leader's Badge

- (a) To make every boy's life brighter and happier.
- (b) To foster clean-mindedness, truthfulness, ambition, and initiative in boys.
- (c) To encourage boys in the pursuit of their studies and hobbies, and especially in the development of their knowledge of mechanical and engineering principles.

The Meccano Guild has been formed to bring Meccano boys more closely together, and to make them feel that they are all members of a great brotherhood of boys, trying to help each other and themselves to get the very best out of life.

Every Meccano boy can join the Guild as an individual member, and so share in the privileges of membership. As soon as possible he should attach himself to a local Meccano Club, or if there is not one already in existence, he should take steps to form one with the assistance of his Meccano boy friends.

The Secretary of the Guild is always very glad to help with the formation of new Meccano Clubs, and to provide literature which will give all the necessary information.

Every new Meccano boy should immediately get to know all about the Guild in order that he may get the full pleasure from Meccano model-building, and the companionship and friendship of hundreds of thousands of other boys who are glad to welcome him as a friend.

Forms of application and all other information will be furnished by The Secretary, Meccano Guild Headquarters, Old Swan, Liverpool. Each member on joining is furnished with a beautiful Certificate of membership ready for framing, and should obtain the official member's badge.

Guild Notes

By the SECRETARY.

Movement. I wish that all Guild members could look over my shoulder and share my delight and pleasure when I am opening Imy morning mail. Not only do enthusiastic letters reach me from all parts of Great Britain, but every mail brings similar letters from all corners of the world. It is most inspiring to receive them, for they all speak in the highest terms of the splendid work the Guild is doing.

Our Next I am looking forward to being able to Session. help our Clubs to have a most successful session during the next three months. Already I have been in touch with the Leader and Secretary of every affiliated Club and I want to place the knowledge and experience in club work of myself and of my special staff at the disposal of Club Leaders. Every week new Clubs are being formed throughout the country and I would ask those Guild members who live in towns where there is no Meccano Club to write to me for information and advice as to forming Clubs in their town.

A New Feature. At my suggestion the Clubs this session are making a special feature of Lectures, and many local gentlemen who take an interest in boys' welfare have already consented to give Lectures to different Clubs. Managers of Gas and Electricity Works, Engineers, Chiefs of Fire Brigades—all have a wonderful story to tell of the interesting things in their own particular sphere of activity. Where necessary I am willing to do all I can to help Club Leaders to get into touch with these gentlemen.

Meccano We are busy at Headquarters preparing Lectures. a series of Meccano Lectures which will shortly be available for Club Leaders or other gentlemen to read on Club nights. These Meccano lectures will cover interesting subjects, and at the moment we are working on three, the titles of which will be "The Lives of Great Inventors," "The Romance of Electricity" and "The World's Greatest Bridges." Other Lectures will be added from time to time, so that in due course we shall have a selection of those subjects which are of the greatest interest to boys.

A Guild Rally. I am making arrangements to pay a personal visit to some of our Clubs during the coming winter, and where possible shall make my visit the occasion for a Meccano Guild Rally. On the evening of Saturday the 26th November I am to visit the "Holy Trinity Meccano Club" at Barnsbury, London, N.1, and I hope to make that occasion a rally for all the Meccano Clubs in London, if suitable accommodation can be arranged. I shall then be able to tell all members who attend of the great work the Meccano Guild is doing and also to give them some account of the many interesting manufacturing processes which are carried on in the great Meccano Factory.

Guild A delightful illustration of the ex-Friendships. cellent associations arising from the Meccano Guild was mentioned in a letter which I received last week from Master J. Long, the Secretary of the City of Norwich School Meccano Club. Master Long wrote me from Paris and mentioned that he was in the French capital solely through the Correspondence Club. "Less than a year ago," he says, "you found for me a French correspondent, Master Amaury Laurentin, who recently invited me to visit him for a month—a fortnight in Paris and a fortnight in the country. This I am now doing. It is all due to your Correspondence Club and we both wish to thank you heartily for starting it, for it has thus brought to us what may well be the most momentous holiday of our lives." It is interesting to know that Master Laurentin will return to Norwich with Master

A Meccano Club I recently had the pleasure of a visit for Geneva. at Headquarters from Master Underwood, an enthusiastic Meccano boy who had come all the way from Geneva with the purpose of seeing the Meccano Factory and meeting the Guild Secretary well at the front of his mind. I was interested—but not surprised—to hear that there are a large number of Meccano users in Geneva and that it is Master Underwood's intention on his return to Switzerland after his stay in this country, to form a Meccano Club in Geneva. Every good wish for his success.

Special Merit Medallions:





I am particularly desirous of encouraging members to read instructive papers on subjects which interest them at their Club meetings. It is excellent training for boys to stand up before their friends and to address them in this way. A popular and instructive discourse should be aimed at, to last from a quarter to half an hour and a discussion may follow, members adding some

interesting facts to those dealt with by the member who reads the paper.

In getting up such papers the great secret is thorough preparation. Facts should be sought for from every possible source such as parents, libraries, teachers, fellow-workers, and chums. The facts thus obtained should be set down briefly and clearly in proper order and the whole paper should be rehearsed and correctly timed. It may be illustrated by working models. There are a great number of subjects to choose from in all branches of engineering and science and I am sure that Club Secretaries will be very pleased to hear from members who will offer to read such papers at their Clubs.

In order to offer encouragement I am this session again allotting a special medallion to each Club, to be given to the member who delivers the best paper. After the papers have been read at the Club meetings they must be sent to me with any comments by the Secretary or Leader at the end of each session. The Medallions, which are here illustrated, are very beautiful in both design and finish and have been produced specially for us by a well-known firm. On each Medallion will be engraved the name of the recipient and I trust that all Club Leaders will help me to make this valuable part of the Meccano Club work a great success.

The Guild Recruiting Campaign.

HOW EACH MEMBER CAN HELP.

Now is the time for all enthusiastic members to do a good turn to the Guild movement. I want all Meccano boys to understand the objects of the Guild, for once they realise what the Meccano Guild stands for they will join our ranks enthusiastically and without hesitation. There are many thousands of Meccano boys in this country who, strange to say, have



never yet heard either of the Meccano Guild or the Meccano Magazine!!!! Most of us would scarcely believe this to be possible, so widely do we endeavour to make both known, yet the numerous enquiries I receive every day show this to be the case. I want you all to help me to get these Meccano boys to be Guild membersindeed, it is the duty of each Guild member to do his best to spread

If each of our members brings only one Meccano boy as a new member our membership will be doubled. I am aiming for even a greater achievement than that, however, and I want every member to endeavour to recruit at least three new members. This was the basis of our Recruiting Campaign which met with such remarkable success during the last two winter sessions.

The campaign is being started again this session, and to each member who obtains three new recruits for the Guild a handsome medallion will be awarded. This medallion (which is here illustrated actual size) is a mark of merit of which any boy may well be proud. Recruiting forms may be had on application to Headquarters and each member participating in the campaign should take particular care to see that his own name and address are written on the back of every form used.

Club Notes.

ASKEAN (London, S.E. 14) M.C.—Held enjoyable outings during the summer session on one occasion paying a visit to Buckingham Palace to view the changing of the Guard; then proceeding by way of Constitution Hill to Rotten Row, and the banks of the Serpentine to the Science Museum, Kensington. Here an inspection was made of the interesting mechanical models, many of which provide suggestions for Meccano builders. The original locomotives, the "Rocket" and the "Sans Pareil," are to be seen in the Museum and very exact models of modern omnibuses in the same room form a peculiar contrast. The club has also visited the Victoria and Albert and the Natural History Museums. The visits were made more enjoyable by the interesting discourse of the Leader on many and varied subjects. Leader. Mr. A. R. Gregory, Aske's Boys' School, Pepys Road, New Cross, London, S.E. 14.

DUDLEY M.C.—Indoor meetings were continued until May, after which month the meetings were adjourned to Buffery Park for cricket and other sports. Several successful and well-attended rambles have been held during the summer months, visits being made to Penn Common and Wren's Nest where "treasure hunts" have been a popular feature. An interesting programme is being arranged for the coming session. Leader: Mr. L. Lewis, 2, Thornley Street, Wolverhampton.

RUABON M.C.—A very successful Boxing Competition was arranged to run through the summer months and was made possible by the loan of a piece of land which was fitted up with a ring. A lively interest was taken by all the members and many keen contests were witnessed. The final contest was for the championship with a purse of 10s. and a silver medal, while the runner-up was awarded a bronze medal. Master J. W. Ellis obtained the first prize at an entertainment at the close of last session for a model of a crane. The Savings Bank is even more prosperous than it was last session and the prospects of the Club for the winter are very bright. Leader and Secretary: Mr. A. H. Squires, "Bryn End," Ruabon.

ST. MARY WITH ST. GABRIEL (London, S.E. 11) M.C.—The activities of this Club have surpassed all anticipations and an extremely successful session has been held. The Meccano section of an Exhibition in aid of the Church funds was opened by J. D. Gilbert, Esq., M.P., who started a motor which set several models in motion. The Exhibition naturally resulted in an increase in membership. Competitions have been held in speed and accuracy in building, and lantern lectures on "Aeroplanes" and "Railways" also have been a feature. Prizes were awarded for the best essays on these lectures. During the summer months a cricket team has played matches with other parochial clubs, the Club team being successful in several matches. Club membership is rapidly increasing, the members being drawn from several London districts. Leader: Mr. G. Treves, 207, Newington Butts, London, S.E. 11.

Southville (Bristol) M.C.—The cricket team has played six matches during the summer and of these only two were won, and these by a small margin. The total runs made during the season were 301, Master J. Hillier accounting for 89. In bowling, Master S. Dembrey, the captain of the team, took 31 wickets at the cost of 10 runs each. A football club has been established for play during the winter, and black and gold has been decided upon for the calculated of the manharationals. A good fixture list has been arranged and many enjoyable games are anticipated. Leader: Mr. Allen, 15, Truro Road, Ashton, Bristol.

KING STREET (Luton) M.C.—Activities during the summer months have been somewhat curtailed, but cycle runs have been held and the cricket team played several matches. In August, an outing to a delightful spot several miles from Luton, called Totterhoe Knolls, was held. Leader: Mr. S. Burgoyne, 58, Wellington Street, Luton, Beds.

WESTERTON (Glasgow) M.C.—An enjoyable winter session finished on the 26th March, and a cricket club was successfully formed during the summer months, matches with neighbouring teams being arranged. Several members also joined the local tennis club. On the occasion of the Australians' visit to Glasgow, a party was formed to attend the match on July 11th and a very enjoyable day was spent. The session closed with a picnic. Leader: Mr. F. J. Ireland, "Oakenholt," Westerton, Glasgow.

BARNETBY (Lincs.) M.C.—Had a very enjoyable summer session with picnics, cricket matches, and other sports. Arrangements for a new Club-room are being made for the next session and a particularly good programme is anticipated. Leader: Mr. H. Brader, 28, Victoria Road, Barnetby, Lincs.

AIRDRIE Y.M.C.A. M.C.—Very successful summer session has been held, a particularly successful Exhibition being arranged in which special prizes were awarded for the best models, four valuable prizes being given by the Secretary of the Y.M.C.A. Consolation prizes of nuts and bolts were given to all the other competitors. The Club assisted a local Meccano dealer in display work, in return for which help the dealer has offered a special prize for the next competition. Present membership is 27, and several new members are waiting to be enrolled. A sports meeting was held with great success, and there is every prospect of the coming session of this recently affiliated Club being most enjoyable. Leader and Secretary: Mr. R. Bell, 125, Aitchison Street, Airdrie.

NEWTONGRANGE (Midlothian) M.C.—An interesting programme had been arranged but was so interrupted by the miners' strike that it had to be abandoned. Cricket matches were played during the summer. A money box is placed in the Club-room, and spare coppers are deposited therein for the purchase of an Electrical Outfit for Club use. Lectures are being arranged for the ensuing session. Leader: Rev. W. Lindsay, The Manse, Newbattle, Midlothian.

NEW MALDEN M.C.—During Welfare Week the Club was invited to give an Exhibition of Models, and a stall was reserved for their use. Some fine models were made, including the Loom, Workshop, Crane, and many others. During this session an enjoyable

visit has been paid to the Leyland motor works at Ham, Surrey, and the different machines were explained by one of the chiefs. Two cricket matches have been played of which the Club won one and lost the other. The members are looking forward to next session, which they anticipate will be even more enjoyable than the last. Leader: Mr. V. Hammond, 11, Penrith Road, New Malden.

NEW BRANCEPETH M.C.—During the summer, cricket, tennis, and cycle rides, as well as Model-Building evenings, have been on the programme, and many fine models have been submitted for exhibition. In the Club competition, Master H. Meek won the first prize, with a model of a modern gun and carriage. Lectures have been very popular, and the Club has visited the Sunderland shipyards and quay. The present membership is 22, and in spite of the miners' strike which so seriously affected this part of the country, the Club has had a very enjoyable session. Leader: Mr. J. Hardy, Post Office, New Brancepeth.

PRINCES RISBOROUGH M.C.—This is a most successful Club, the membership now standing at 60. At the commencement of the session considerable difficulty was experienced in coping with the increased membership. The Club room, placed at the disposal of the Club by the Rector, was soon found to be too small, and an increase in accomodation, was again very kindly provided by the Rector. A Meccano Model-Building competition was held in May, and prizes were awarded. A cricket team was formed and of the five matches arranged by the Club Leader, the Club won four and lost one. In addition, friendly matches took place among the members. The members took part in the annual Hospital Parade in aid of the Royal Bucks Hospital, and assisted to raise a considerable sum of money. A Club outing was held on Whit Monday when a trip was made to White Leaf Hill. The members met at headquarters and marched through the town, headed by the Club banner, the baggage party with their gaily painted baggage-cart following in the rear. On arriving at the Hill, games were indulged in, and considerable fun and amusement was caused by toboggan rides down the hill-side, A splendid tea was given by various friends, after which games were again played. Before dispersing, hearty cheers were given for the Club Leader. Secretary, and other interested friends. An exhibition of models is being arranged for the Winter Session, also a series of social evenings to raise funds for carrying on the work of the Club. A holiday camp has been suggested for next summer, and is under consideration. Leader: Mr. R. Bailey, Vine House, Church Street, Princes Risborough.

ALL SOULS (Liverpool) M.C.—Membership increasing, 6 new members waiting to be enrolled. Model-Building evenings have been held and also games during the summer and a Lecture on "Photography" by the Secretary. A model of the Blackpool Tower was built and lent to a local Meccano dealer for a window display. The first annual picnic was held on August Bank Holiday at Wavertree, the scene of a pleasant ramble. Lunch was taken at Childwall Abbey, after which games were indulged in. The afternoon was spent in cricket and prizes were awarded in the sports held subsequently. New session opens the first week in September. Secretary: Master T. J. Roberts, 170, Dryden Street, Liverpool.

OLAYGATE (Surrey) M.C.—Wintersession commenced on the 3rd of September and evenings have been arranged for Model Building, Carpentry, and for the Club's ever successful Concert Party. A Savings Bank has been introduced and Lectures are being arranged. The energetic Leader, Mr. J. W. Haynes, proposes to start two other Meccano Clubs this winter, one at Chessington, and the other at Esher. Our hearty good wishes go to him for his success. Leader: Mr. J. W. Haynes, "Fontmell," Covers Road, Claygate, Surrey.

HOLY TRINITY (Barnsbury, London, N.1) M.C .--I recently had the pleasure of showing the Leader and Secretary of this very progressive Club around the Meccano Works. I understand that a very successful session is anticipated and a big programme is under consideration. During the past session talks have been given by the Leader on "Magnetism" and "Electricity" with practical demonstrations. The Meetings have been devoted to Model Building, Fretwork, and Photography, and Lectures by Mr. Wanstall ("The Printing of a Newspaper") and by Mr. C. Godwin ("Birds which frequent London"), and a successful Garden Fête was held in July. The programme for next session includes Sections Night. Model Building, and visits to Pascall's Chocolate and Bryant & May's Match Factories. The third annual Exhibition is arranged for the 29th of October. The Club membership now numbers 23, with 17 honorary members in addition. The accounts show a balance of nearly £5 on the right side. Leader: Mr. S. H. Wilson, 29, Thornhill Road, Barnsbury, London, N. 1.

CIRENCESTER GRAMMAR SCHOOL M.C.—During the past session have held an Exhibition and paid a visit to the local Electricity Works. Several papers have been read on "Ships" and impromptu concerts have been arranged, as well as Model-Building evenings. The Club is looking forward to Lectures by Mr. A. Stradling on "The Setting of Clock Times to Greenwich Time" and "The Harmonograph." Leader: Mr. N. Gobey, "Clovelly," Victoria Road, Cirencester.

Norwich Enterprize M.C.—Summer session has been taken up with scouting games, paper chases, and open-air gymnastics on the Heath. Members took an important part in the Garden Fête held at Crown Point in August. The second prize in the Fancy Wheel Parade was won by one of the members dressed as a motorist, with a model of a car. Old English sports followed, including ham-cutting, belling-the-chicken, blindfold-drawing, wheel-barrow races, and treasure hunting. The Club members gave a praiseworthy gymnastic display under the direction of the Club Leader. The programme for the coming session is now being considered. Leader and Secretary: Pastor A. B. Grosvenor, 118, Vincent Road, Norwich.

has been held owing to several of the members being laid up with an infectious complaint. In the spring a successful Exhibition was held in aid of the Western Infirmary, and some twenty different models were exhibited, including a Loom, Electric Locomotive, Rope Making Machine, and a Travelling Crane. The session closed with a balance in hand, and great things are expected during the coming session. Leader: Master A. W. A. Dick-Cleland, Benvue, Kilcreggan, Dumbartonshire.

St. Annes (Leicester) M.C.—Outings were arranged during the summer, and the Club paid a visit to Mountsorrel Granite Quarries, where an interesting afternoon was spent. Games were enjoyed after tea on Castle Hill. There is every prospect for a successful session, which starts at the end of September. Leader: Mr. K. W. Smith, 8, Sunnycroft Road, Leicester.

GRIFFITHSTOWN (Mon.) M.C.—Several rambles and paper chases have been held during the summer and it is hoped to fix up a cricket team for next summer. An interesting programme is being arranged and an enjoyable session is anticipated. Leader: Mr. J. Briggs, 21, St. Hilda's Road, Griffithstown.

(Continued on Page 8)

Clubs not yet Affiliated.

CLAYGATE GIRLS' M.C.—The first Meccano Club for girls has been commenced at Claygate, Surrey, and has a membership of over 20. The first meeting was held on the 3rd inst. An interesting programme of Lectures and discussions has already been arranged. The Club is under the leadership of Mr. J. W. Haynes, the enthusiastic Leader of the Claygate (Boys) Meccano Club, whose address is: "Fontmell," Covers Road, Claygate.

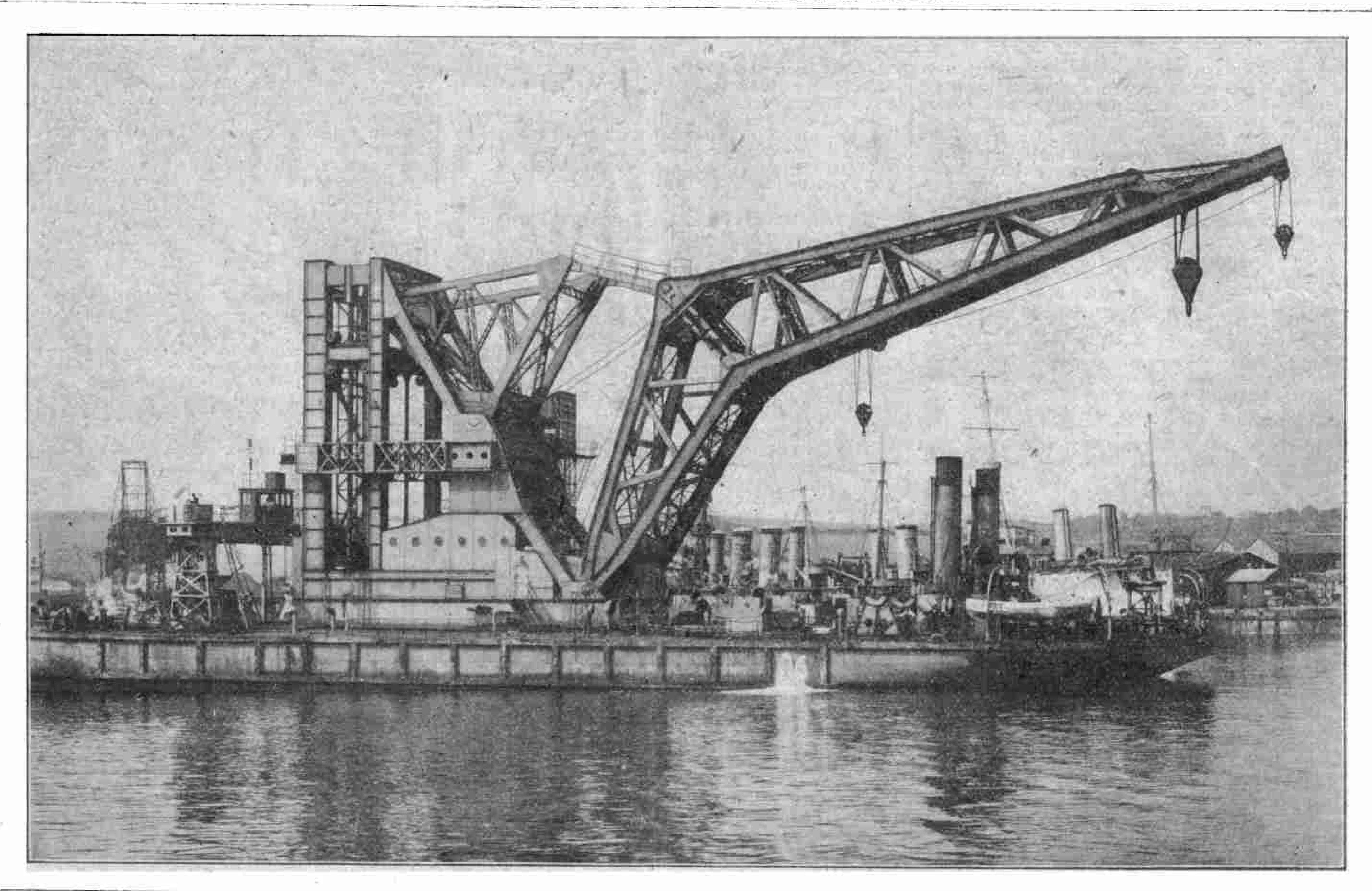
REYKJAVIK (ICELAND) M.C.—We welcome this new Club, which made a splendid start with a membership of over 50. A special Club Recruiting Campaign has been instituted, and Club Competitions are being held. An interesting paper on Inventors was read by the Club Leader, Mr. Otto B. Arnar. Several of the members are able to read English, and eagerly devour the contents of the Meccano Magazine. Secretary: Master Paul Helgason. Leader: Mr. O. B. Arnar, Lofskeytafrædingur, Reykjavik, Iceland.

LOWER CIRCULAR RD. M.C. (Calcutta, India).—
This new Club was recently formed and a first meeting held on the 11th of June. The Rev. S. Pearce Carey, M.A., kindly consented to become the Club Leader. Meetings are held every Saturday evening, and several Model-Building evenings have already been held. We heartily welcome to the Guild this new Club and look forward to hearing further news of its doings by next mail. Leader: Rev. S. Pearce Carey, M.A., Secretary: Master H. C. Key, c/o Dr. G. H. Key, Passenger Rest House, Babu Ghat, Strand, Calcutta, India.

Guild Members and the New £250 Prize Competition.

The attention of all Guild members is directed to the announcement of the new £250 Prize Competition made in this issue. In addition to the valuable cash prizes and numerous other prizes awarded, the Guild offers three special prizes of £5 in cash to each member of the Guild who gains the best prize in his section. This presents a splendid opportunity to members of the Guild and should be an additional encouragement for them to compete in this great contest.

All Meccano boys should join the Guild at once, not only that they may obtain a greater pleasure from building Meccano Models and these increased awards in the Competition, but also that they may have the world-wide friendship of hundreds of thousands of other Meccano boys who are already members of the Guild. By becoming members of the Guild, Meccano boys may join the Meccano Club in their town. These Clubs are commencing their new session at the end of this month and any Meccano boy who wears the Guild badge will receive a warm welcome from the Leader and Secretary and also from the other members of the Club.



The Largest Pontoon Crane in the World.

We believe readers of the Meccano Magazine will be greatly interested in our illustration which shows the largest pontoon, or floating crane in the world, officially known as "Crane Lighter No. 4," and the property of the British Admiralty. It is capable of lifting a maximum load of 250 tons, over a radius of 100 feet, and to a height of $77\frac{1}{2}$ feet above the level of the water. It has actually been tested to lift a load of 312 tons.

The crane is mounted slightly forward of exact mid-ships, the pontoon being 242 feet in

length and 861 feet in breadth. These great dimensions make it possible to lift heavy loads with a minimum of tipping of the pontoon's deck. By raising or lowering the jib the reach of the crane is altered, thus enabling loads to be picked up from the deck of the pontoon at, say, a reach of 70 feet, swung round at a right angle and lowered into place at a reach of 100 feet. The crane, as erect as possible, picks up its load, swings round in line with the place where the load is being dropped, and the jib is then lowered, extending the reach of the load as it hangs, until it comes immediately over the spot where it is finally deposited. The base of the crane rotates and rests upon rollers which have a path of 25 feet radius.

The mounting of the crane and distribution

of the enormous weight has been so carefully thought out that even when the crane-arm is elevated to its greatest extent without a load, and has its minimum reach athwart-ships, the deck is inclined only 4 degrees in a direction of depression on the side behind the elbow.

Hauling is accomplished by steel ropes and the maximum effort is made with the jib inclined at an angle of 40 or 45 degrees to the horizontal.

When a heavy load is on, both steam and hydraulic brakes control the movements with great accuracy and precision.

Our illustration is from a photograph specially taken for the Meccano Magazine by permission of the Secretary of the Admiralty.

Meccano Story Competition

In the last issue of the Meccano Magazine we announced the result of the Essay Competition and printed the Winning Story. We have pleasure in printing below the story which won the second prize.

It is interesting to know that "The Test" is based on actual fact. "About a year ago," writes the author, "a friend of mine, a farmer's son, 22 years of age, went to Canada to work on a farm. He found the place in an uncultivated condition, and in great need of machinery. In his schooldays my friend was an enthusiastic Meccano boy, and when he went abroad he took most of his Meccano parts with him. Since arriving at the farm he has, he now tells me, made several implements -some exact copies of the ones in your Manual, and all upon the Meccano principle of interchangeable parts. It was this that gave me the idea for the Story, and to my thinking no more striking instance can be given of the value of Meccano as an educational medium."

"The Test."

By WILLIAM INGLES ROGERS.

When Archie M'Bush was ten years old his father gave him a No. 4 Meccano, and thereafter, in Ted Sprocket's play-yard, the two were daily to be seen having the best fun it is possible for boys to have in this rampagious world. The neighbours sneered, and the rumscallions who did nothing but loaf or indulge in stupid horseplay called them "muffs" and "mopers." But Archie's parents were of the sort that look ahead, and they said: "Wait till they get older. That will be the test."

And so in course of time Archie M'Bush grew to be sixteen years of age when, sad to relate, his parents died and he, with a small fortune, was sent to his only living relative in Australia. It was Christmas when he arrived and the Australian harvest was in full swing. But to see the way in which the half-breed labourers handled the rich sheaves of grain, and later threshed them, made our young mechanician sore. Such a contrast it was to the English and American ways! But Archie was outspoken and his mind was soon divested of its burden of thought.

"You want a good reaping outfit, Uncle," he observed. "And a horse-rake, and a thresher, and a stack elevator, and——."

"Huh!" interrupted the old colonist. "Them things cost money. Tho' I aren't above wishin' I 'ad 'em. Th' farm's ruinin' fer want of cultivation."

"Get machines," said his matter of fact nephew.

"Machines be dear. They'd cost thousands.

But if I could get one that would do th' lot——."

Archie at once plunged into thought. And, boys, let me tell you what perhaps you already know: that "Meccano Boys" can think! Meccano is a

thinking hobby! You can play games that are pleasant while they last, but when the time comes for headwork—well, that's the TEST! And it's the Meccano Boy that meets it. Now, isn't that so?

"Been wool-gatherin', laddie?"
"No," replied our hero with a grin. "But—it's a hot night—let's sit on the verandah, Uncle. I've got something to show you."

Archie ran for his "No. 4," which I should have told you he had brought to his new abode.
"Bless my soul!" cried Uncle Caleb. "I've no time fer games. But I shud like t' see th' meanin'

Archie showed him! First he made a plough, and then, with the very same "bits o' iron," a rake, a harrow and a scarifier. Then followed a hay tedder, a farm tractor, and a reaping machine with long efficient arms.

tractor, and a reaping machine with long efficient arms.
"Reckon you'll miss your sleep, Caleb," Archie's aunt ventured to remind them when midnight had

come and gone.
"G'wan t' bed!" snapped the farmer. "I'm hinterested!"

Archie kept on constructing, and explaining what he had not time to make. A corn-shaker, a manure waggon, a windmill; then a pump, a ground-roller, a timber-drag, a chaff-cutting machine, and a clever self-acting churn.

"Dang my buttons!" exclaimed the delighted agriculturist. "Th' mischief's in them bits o' iron! But how's it to help my farm?"

The time had come to broach the BIG IDEA!
And Archie was not long in divulging it!

"It's this way, Uncle," he explained. "You've seen what a toy will do. My money's idle, so I'm going to take it to Melbourne and get some BIG PARTS made! We'll have 'em by next year and with your permission, Uncle, we'll re-name this place. It'll be 'MECCANO FARM.' And we'll show the world what a Meccano farm can do!"

A NEW GRAND

MECCANO PRIZE COMPETITION £250 IN PRIZES

Another big Meccano Model Building Contest is announced, and we want every Meccano boy to know all about it. There will be hundreds of prizes awarded, including nine prizes in cash to the value of £100, and Meccano Outfits to the value of not less than £150. As was the case last year the Competition will be divided into three sections.

- 1. For boys under 10 years of age.
- 2. For boys between 10 and 14 years of age.
- 3. For boys over 14 years of age.

In addition to these prizes the Meccano Guild is again offering three awards of £5 each in cash to the Member of the Guild who gains the best prize in his Section. Forms of entry may be obtained either from your dealer or from us.

There are no restrictions or entrance fees. Any Meccano boy can enter, and the competitor sending in a simple model made with a No. 0 Outfit stands just as good a chance of winning a prize as does the competitor who sends in a complicated model made from a No. 6 Outfit. This Competition will close on April 15th, 1922, for entries from the United Kingdom, and May 31st, 1922, for entries from the Colonies.

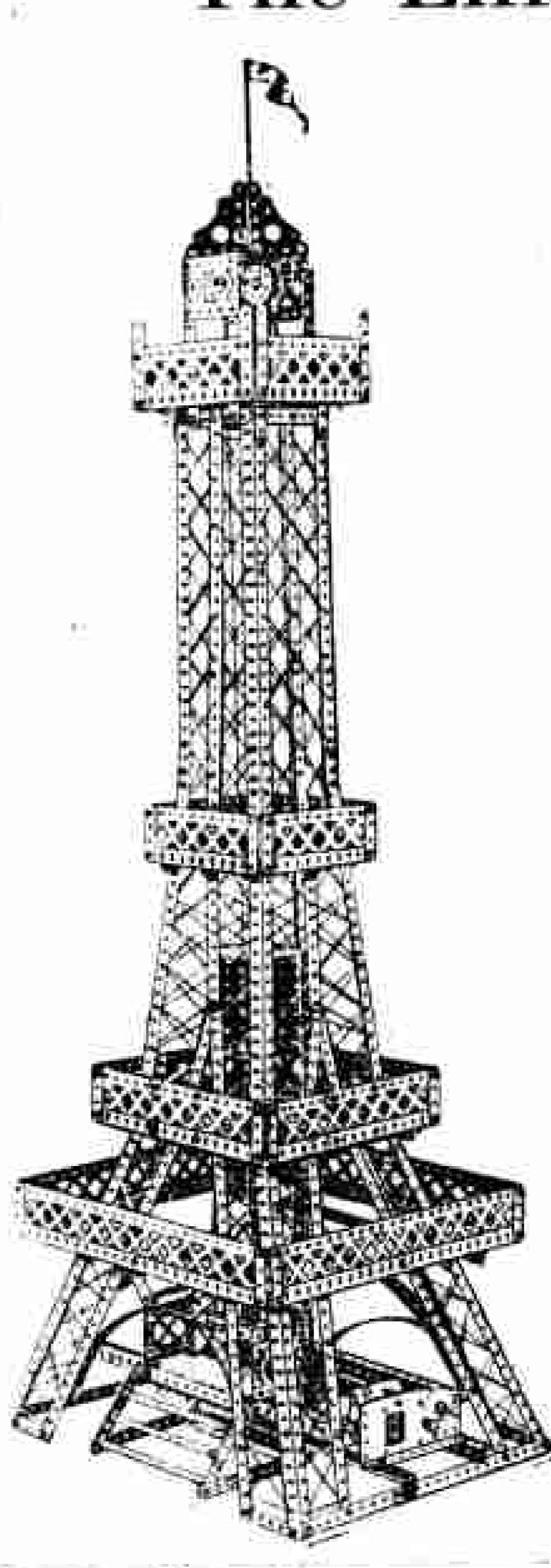
Meccano Manuals of Instructions.



There are two Meccano Manuals of Instructions, and no Meccano boy is properly equipped unless he has them both. -Book No. 1 is the regular Manual which goes with the main Meccano outfits. It contains illustrations and full instructions for making 323 fine models. Price 2s. 6d. (postage 3d. extra).

Book No. 2 contains instructions for building 100 entirely new models, some of which have been designed by our own staff of experts, and others are prize-winning models contributed by Meccano boys, from every country in the world. Price 1s. 3d. (postage 2½d. extra).

The Eiffel Tower.



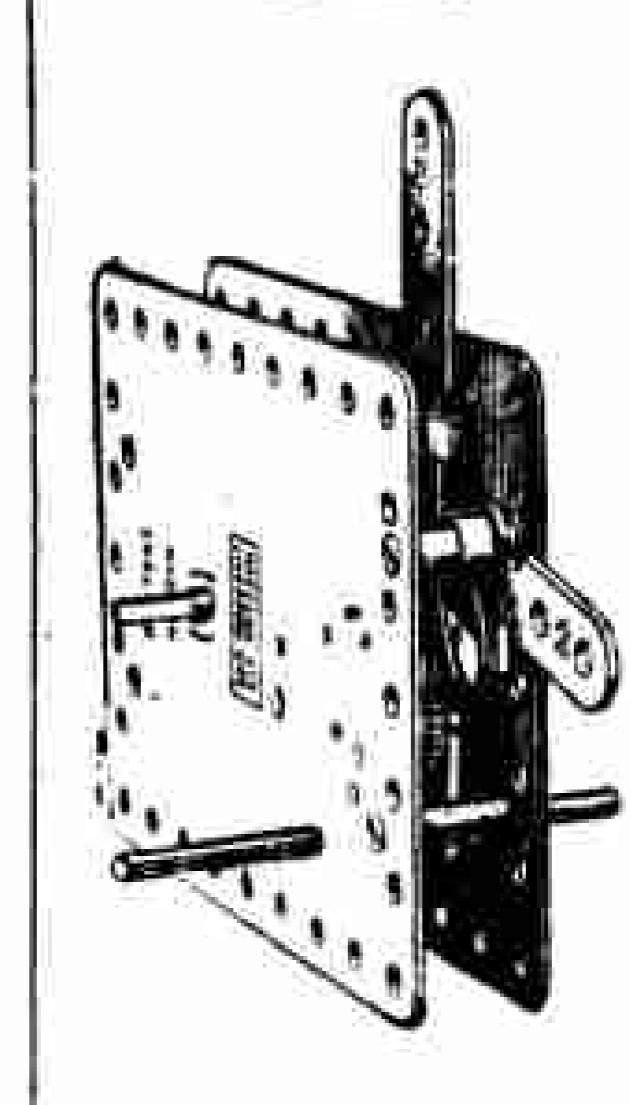
Our congratulations to M. Eiffel, the builder of the famous tower which bears his name, who recently attained his 89th birthday. He celebrated the occasion by entertaining a company of Wireless Engineers in his rooms, situated on the third platform of the tower. Here, over 900 feet above the ground, M. Eiffel has a flat consisting of a comfortable bed-room and a drawing-room.

The Tower was built for the great Exhibition of 1889, and in spite of the fact that some of the greatest engineers of that time prophesied that it would speedily collapse, it is still as strong as ever. The builder of the Tower says that in his opinion the only danger to be feared is rust, but he thinks he will be able to deal even with this, and he believes that his Tower will prove as imperishable as the glory of France.

Change of Address.

Subscribers should immediately notify the Editor of any change of address. Send a postcard giving the old and new address, so that records may be kept up to date.

The Meccano Motors.



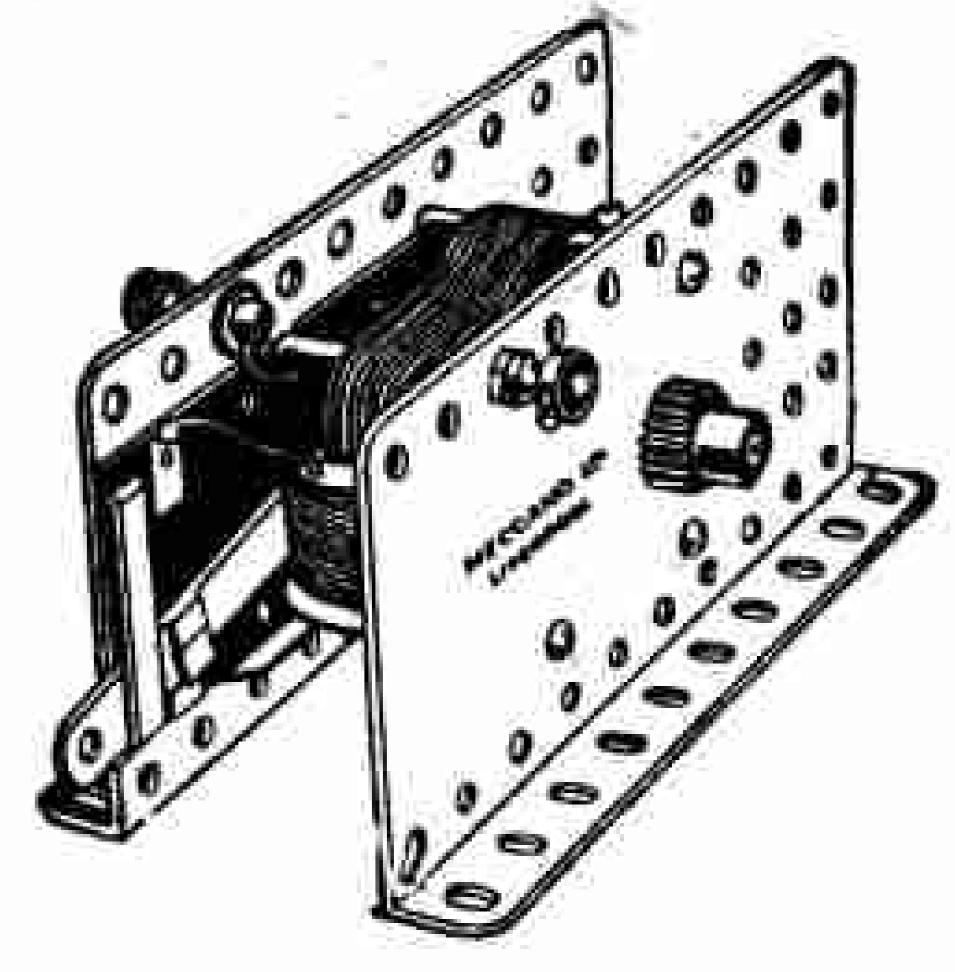
Clockwork Motor.

This is a splendid piece of mechanism, simple, powerful and reliable, and fitted with starting, stopping, and reversing levers. By the use of extra gearing made from Meccano parts, a greater lifting power is obtained.

Price 12/6

Electric Motor.

This motor is well designed, simple, strong, and free from danger. Suitably geared it has a lifting power of over 30 lbs. It may be run by a 4-volt accumulator, or direct from the main if a suitable transformer is



used. Fitted with reversing lever, starting and stopping mechanism, it is the most powerful and satisfactory toy Electric Motor yet designed.

Price 17/6



Our Mail Bag.

The Editor has a little talk in this column with his Meccano boys. Whether he has space to reply to them all here or not, he is always glad to hear from them. He receives hundreds of letters each day and only those which deal with matters which are likely to interest other Meccano boys can be dealt with here.

Correspondents will help the Editor if they will write

on one side of the paper only.

Spencer W. Wilson, Sudbury.-Photo of yourself with Meccanograph safely received, but it is scarcely clear enough for the M.M. Try again.

R. Bates, Le Havre.—You are a fortunate boy to be able to learn the French language in France. We motored through your native Cheadle a day or two ago, and admired the pleasant country.

Dickie Jones, Cheltenham.—We like your breezy letters and we look forward to receiving them. We are pleased your new Meccano friend and yourself enjoy corresponding with each other.

B. O. Goddard, Sandown.—Thanks for interesting photos of the Meccano models which you entered in the "Daily Mail" Competition. We are glad they won such a handsome prize for you.

Alan Mackie, Auckland, N.Z.—It gives us much pleasure to know that your dad and vourself enjoy building models together. We note that you will come over to see us when you are a millionaire. Hurry up and work hard. We want to see you.

Teddie Marrian, Manningham.—If your mother raises no objection there is no reason why you should not run your models with her sewing machine. Of course, the best motive power is the Meccano Electric Motor, and your father is wise in getting one of these for you.

N. E. Willis, Gulgong, N.S.W.-We receive quite a lot of bright sparkling letters from Meccano boys in Australia, just the "newsy" and chatty type we like. It is always a pleasure to hear from you, Norman.

G. Dalziel, Glasgow.—It would never do for the Editorial Staff to stav up all night to bring out the M.M. every week, Gregor. There would soon be no Editorial Staff left. At present there are many difficulties, but all in good time we shall go to press oftener.

V. Warrell, Hammersmith.—We appreciate the keenness and earnestness with which you have set about your work for the Guild, and we wish you every success. The Secretary tells me he is planning to address members of Meccano Clubs in London very shortly, and you may then have an opportunity of meeting him.

H. R. Foxley, Vina del Mar, Chile.—I was glad to have your nice letter and your verses, which are rather too long for me to publish in the M.M. It always gives me special pleasure to know that Meccano boys abroad are building models and taking a keen interest in all our doings at home.

G. Allen, Wisbech.—Thanks for your interesting description of strawberry picking. We had no idea it was such hard work. We will consider your suggestions for improving the M.M.

Philip Crosby, Didsbury.— Now when it simply pours and pours, And I'm obliged to stay indoors, I do not cry or sulk or pout, I bring my big Meccano out. And then I build a model grand, And set it up upon a stand, Then play with it from morn till night, It fills me with such great delight.

We couldn't find room for your verses before Philip, but here they are at last. For a first attempt they are very good.

Otto B. Arnar, Revkjavik (Iceland).-"The name of our Club is Meccanofielag Reykjavikur.' The present membership is 50 and is increasing." We admire the thoroughness with which you have completed your Club arrangements. Your rules are excellent, and your programme a splendid and a very enjoyable one. We shall follow your doings with great interest.

J. Jewell, Subiaco.—Thanks for copy of "The Meccano Chum" which is good and very interesting. We quite understand that Meccano boys in West Africa watch anxiously for each issue.

C. Miller, Frizington.—

"To many a boy Meccano brings joy, And makes the weary hours bright, When the day's work is done he will eagerly run

To play with Meccano at night."

Thanks for your poetical tribute to Meccano, Charles. "Meccano Products" is now replaced by a very beautiful book called "A Message from Meccanotown." We have also reprinted the story of "Dick's Visit to Meccanoland," which had such a big success, and any new Meccano boy can have a copy if he will write to mc.

G. Younger, Holvhead.—We quite understand .your anxiety to receive the M.M. oftener, and we will see what can be done later. We should not care to increase its price as you suggest. We want boys to have all the latest Meccano news for as little outlay as possible. We hope you were successful in putting your sister 'on the Meccano stunt." Thousands of girls keenly enjoy model-building.

Robinson, Georgetown, Guiana.—

"One day I put this question to All the clever boys I knew. Toys of all kinds you have had, Some were good and some were bad, What's the best you've ever tried? With one voice they all replied— 'Meccano!''

We print one of your verses J. L., the last and the best. The other beginning "The shades of night were falling fast" are beautiful, but time-worn; we learned them all off by heart in our school days. In these days, of course, the clarion voice would loudly reply "Meccano" instead of the other less understood word.

L. Brandon (Miss) Beckenham.—Thanks for photo of yourself in your prize-winning costume "Meccano." No wonder your local newspaper refers to it as "magnificent."

W. J. Fearn, Derby.—We were very interested in the photo of your Meccano model for generating a hyperboloid of revolution, and we are glad to know that you have used this model in your lectures with success. We have had the model made here, and it works perfectly.

L. N. Gibson.—Not all the prize-winning models find their way into our Manual, Laurence, else this book would, in size and weight, resemble a Family Bible. We hope your own prize-winner will prove one of the favoured ones.

N. Strickland, Widnes.—We are glad to hear of your pleasure in receiving the Recruiting Medal. With reference to your stock of very old Meccano parts, do not forget that all Meccano boys have the privilege of returning these to us, and having them replaced at half list prices.

G. Hay, Glasgow.—It was a great pleasure to read your cheery, and, in the main, complimentary letter. It is difficult sometimes to strike a balance between what is due to non-Guild members, and that great and increasing army of Guild and Club enthusiasts. The remedy of course is to increase the size of the M.M., and this we hope to be able to do some day. We have blushed ever since we read in your letter that whilst you love and adore Editors, we are the best of them all, and we are blushing at this very minute.

A. Parkhurst, Capetown, S.A.—We liked your letter and your photographs. We have no such mountains in England. Snowdon is our highest, 3,560 feet. We hope you will

write us again.

A. Nixon, Middlesbro.-Glad you consider Meccano a "superb salubrious recreational game, enabling boys to procure an enthralling quota of enjoyment." We are quite sure you mean well Albert, and we appreciate your desire to let us know how much you enjoy your hobby.

W. J. French, Tnysybwl.—The trouble is W.J. that the cost of labour is even now more than three times pre-war: the cost of steel, brass and all the other commodities we use, more than that, whilst the prices of Meccano Outfits are only double pre-war. Only our enormously increased production enables us to keep prices down to their present level.

J. Smith, South Shields.—We shall be very glad to see a photograph of the Railway Station made with Meccano. Your suggestion regarding the list of awards in our big Competition is a good one, and will be adopted.

E. Joyce, Walthamstow.—"I am sure there is nothing a boy would wish for more than to own a Hornby Clockwork Train. Mine is simply ripping." Thousands of boys already agree with you, and hundreds of thousands more will join the ranks of H.C.T. devotees this winter.

A. Riding, Lostock Hall.—You can always purchase a Meccano Electrical Manual separately, and by adding a few simple Electrical Accessory parts to your Outfit, you can make delightful and instructive new models.

CLUB NOTES (continued from page 5)

LISCARD HIGH SCHOOL M.C.—Three interesting Lectures have been held, dealing with the "Electric Car," by Mr. R. Samuel (of the local Tramway Depot), "Locomotives," by a member of the Club, and "Principles of First Aid," by Mr. Brensdon (Scoutmaster of the 3rd Wallasey Troop). Model Building has not been neglected, an arrangement being made with a Meccano dealer to make models from parts provided by him, for exhibition in his window, an arrangement which has worked satisfactorily from both points of view. Visits have been paid at weekends to local power stations and docks, and the first annual picnic was held at Eastham, where an opportunity was taken to visit the entrance and some of the locks of the Manchester Ship Canal. Leader: Mr. H. S. Casey, 3, Brisbane Avenue, New Brighton.

JARROW-ON-TYNE M.C.—A club is being commenced here and anticipates being further developed at an early date. The members are extremely enthusiastic, and a successful session is looked forward to. Any Meccano boys interested, should write to the Club Leader or Secretary for further details. Leader: Mr. W. G. Scott, 20. Kitchener Terrace, Jarrow-on-Tyne. Secretary: Master Stevens, Gordon House, Field Terrace, Jarrow-on-Tyne.

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